DOCUMENT RESUME

ED 338 828 CE 059 518

TITLE	Auto Body and Fender. Ohio's Competency Analysis Profile.
INSTITUTION	Ohio State Univ., Columbus. Vocational Instructional Materials Lab.
SPONS AGENCY	Ohio State Dept. of Education, Columbus. Div. of Vocational and Career Education.
PUB DATE	91
NOTE	37p.; For related documents, see CE 059 517-542.
AVAILABLE FROM	Vocational Instructional Materials Lab, Ohio State University, 1900 Kenny Road, Columbus, OH 43210-1090 ($1.50).
PUB TYPE	Guides - Classroom Use - Teaching Guides (For Teacher) (052)
EDRS PRICE	MF01/PC02 Plus Postage.
DESCRIPTORS	*Auto Body Repairers; Basic Skills; Business Skills; Communication Skills; Competence; *Competency Based Education; Employment Potential; Entry Workers; High Schools; Job Analysis; *Job Skills; Motor Vehicles; Promotion (Occupational); Statewide Planning; Task Analysis; Vocational Education
IDENTIFIERS	DACUM Process; Ohio

ABSTRACT

This comprehensive and verified employer competency list was developed from a modified DACUM (Developing a Curriculum) process involving business, industry, labor, and community agency representatives from Ohio. This competency list contains 10 units (with or without subunits), competencies, and competency builders that identify the occupational, academic, and employability skills needed to enter the auto body and fender repair business as an auto collision technician. Within the outline are three levels of items: core (required, the basis for state vocational competency tests); advancing (needed to advance in an occupation); and futuring (needed to enter and remain in a given occupation 3 to 4 years from now). The units cover the following: (1) basic skills; (2) nonstructural analysis and damage repair; (3) structural analysis and damage repair; (4) mechanical and electrical components; (5) plastics and adhesives; (6) painting and refinishing; (7) service management; (8) communications; (9) occupational skills; and (10) employability skills. (KC)

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OCAP

OHIO'S COMPETENCY ANALYSIS PROFILE

AUTO BODY AND FENDER

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Ohio's Future at Work

Division of Vocational and Career Education
Ohio Department of Education

Vocational Instructional Materials Laboratory
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What is OCAP?

"A comprehensive and verified employer competency list will be developed and kept current for each program." This is the second objective of Imperative 3 of the *Action Plan for Accelerating the Modernization of Vocational Education: Ohio's Future at Work*. Ohio's Competency Analysis Profile (OCAP) lists are the Division of Vocational and Career Education's response to that objective. OCAP lists evolve from a modified DACUM process involving business, industry, labor, and community agency representatives from throughout Ohio. The OCAP process is directed by the Vocational Instructional Materials Laboratory at The Ohio State University's Center on Education and Training for Employment.

How is OCAP used?

Each OCAP contains units (with and without subunits), competencies, and competency builders that identify the occupational, academic, and employability skills needed to enter a given occupation or occupational area. Within that outline there are three levels of items: core, advancing, and futuring. Core items are essential to entry-level employment. These items are required to be taught and will be the basis for questions on the state vocational competency tests (scheduled to begin in FY93). Advancing items (marked with one asterisk) are needed to advance in a given occupation. Futuring items (marked with two asterisks) are needed to enter and remain in a given occupation three to four years from now.

Districts may add as many units, subunits, competencies, and competency builders as desired to reflect local employment needs, trends, and specialties. Local advisory committees should be actively involved in the identification and verification of additional items. Using OCAP lists, instructors will be able to formulate their courses of study and monitor competency gains via the new competency testing program.

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OHIO COMPETENCY ANALYSIS PROFILE

AUTO BODY AND FENDER

(AUTO COLLISION TECHNICIAN)

UNIT 1: Basic Skills

COMPETENCY 1.0.1: Practice safety procedures and shopkeeping

COMPETENCY BUILDERS:

1.0.1.1 Recognize liability factors of technician and employer
1.0.1.2 Identify personnel health and safety hazards according to OSHA guidelines
1.0.1.3 Identify methods of disposing of hazardous waste according to EPA regulations
1.0.1.4 Promote environmental concerns when discarding parts
1.0.1.5 Inspect air make-up and exhaust systems (including intake filters, exhaust filters, fan, and other mechanical components of the system)
1.0.1.6 Ensure proper filtering and ventilation
1.0.1.7 Operate exhaust systems
1.0.1.8 Wear proper spray mask and mask filters
1.0.1.9 Wear proper safety shoes, gloves, work clothes, and hearing and eye protection
1.0.1.10 Operate power switches
1.0.1.11 Operate fire extinguisher
1.0.1.12 Operate air station outlets
1.0.1.13 Follow company procedural manuals
1.0.1.14 Follow specifications in manufacturers' manuals
1.0.1.15 Use collision estimating guide
1.0.1.16 Follow government and company safety regulations
1.0.1.17 Display and encourage safety awareness
1.0.1.18 Maintain clean work and shop area
1.0.1.19 Perform safety audits and inspections

COMPETENCY 1.0.2: Maintain tools and equipment

COMPETENCY BUILDERS:

1.0.2.1 Practice safety procedures
1.0.2.2 Sharpen drill bits
1.0.2.3 Dress punches, screwdrivers, and chisels
1.0.2.4 Clean and service air compressor and moisture traps
1.0.2.5 Service paint facilities
1.0.2.6 Service hydraulics
1.0.2.7 Service welding equipment
1.0.2.8 Service frame and measuring equipment

*Advancing
**Futuring

COMPETENCY 1.0.3: Lift cars

COMPETENCY BUILDERS:

1.0.3.1 Practice safety procedures
1.0.3.2 Identify lift points
1.0.3.3 Support car using jack stands
1.0.3.4 Lift car using portable jack
1.0.3.5 Lift car using electric, hydraulic, and air hoists
1.0.3.6 Inspect stability of vehicle after lift

COMPETENCY 1.0.4: Analyze metals

1.0.4.1 Identify types of metals
1.0.4.2 Identify characteristics of metals

COMPETENCY 1.0.5: Cut metals

COMPETENCY BUILDERS:

1.0.5.1 Practice safety procedures
1.0.5.2 Determine size of cut using proper measuring device
1.0.5.3 Use tin snips, hacksaw, metal shears, cutting wheels, and air chisels
1.0.5.4 Operate plasma system
1.0.5.5 Operate oxyacetylene system

COMPETENCY 1.0.6: Repair fasteners

COMPETENCY BUILDERS:

1.0.6.1 Practice safety procedures
1.0.6.2 Identify nuts, bolt sizes, and grades
1.0.6.3 Identify one-time fasteners
1.0.6.4 Remove and replace nuts, bolts, screws, and rivets
1.0.6.5 Drill and tap holes
1.0.6.6 Chase damaged threads

COMPETENCY 1.0.7: Repair electrical wiring

COMPETENCY BUILDERS:

1.0.7.1 Practice safety procedures
1.0.7.2 Identify wire types and sizes
1.0.7.3 Splice electrical wire
1.0.7.4 Solder electrical wire
1.0.7.5 Use digital ohmmeter
1.0.7.6 Use wire strippers and crimpers
1.0.7.7 Use test lights

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UNIT 2: Nonstructural Analysis and Damage Repair

COMPETENCY 2.0.1: Prepare damaged surface

COMPETENCY BUILDERS:

2.0.1.1 Practice safety procedures
2.0.1.2 Verify receipt of correct parts
2.0.1.3 Remove dirt, grease, and wax
2.0.1.4 Analyze damage report and damage to determine appropriate methods of repair
2.0.1.5 Remove outside trim and moldings
2.0.1.6 Remove inside trim and moldings
2.0.1.7 Remove nonstructural body panels and components
2.0.1.8 Remove mechanical and electrical components
2.0.1.9 Protect nondamaged panels and parts
2.0.1.10 Remove corrosion protection, undercoatings, sealers, and other protective coatings
2.0.1.11 Remove repairable components for off-car repair

COMPETENCY 2.0.2: Replace and adjust outer body panel

COMPETENCY BUILDERS:

2.0.2.1 Practice safety procedures
2.0.2.2 Determine direct and indirect damage and direction of impact
2.0.2.3 Plan methods and order of repair
2.0.2.4 Remove and replace welded steel panel or panel assembly
2.0.2.5 Determine damage to aluminum body panels and repair
2.0.2.6 Remove, replace, and align hood, hood hinges, and hood latch
2.0.2.7 Remove, replace, and align deck lid, lid hinges, and lid latch
2.0.2.8 Remove and replace doors, tailgates, hatches, lift gates, latch assemblies, and hinges
2.0.2.9 Remove, replace, and align bumpers, reinforcements, guards, isolators, and mounting hardware
2.0.2.10 Check and adjust front fenders, headers, lamps, and other panels
2.0.2.11 Check door hinge condition and door frames for proper fit
2.0.2.12 Check and adjust door clearances along quarter panel, door, rocker panel, fender, and top
2.0.2.13 Use power and hand tools to remove panels

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COMPETENCY 2.0.3: Repair and finish steel metal surface

COMPETENCY BUILDERS:

2.0.3.1 Practice safety procedures
2.0.3.2 Identify abrasives needed for repair
2.0.3.3 Identify type of metal
2.0.3.4 Remove paint from damaged body panels
2.0.3.5 Pick and file damaged body panels
2.0.3.6 Disc-sand repaired body panels
2.0.3.7 Use power and hand tools to straighten panels
2.0.3.8 Weld cracked or torn steel body panels according to manufacturers' specifications
2.0.3.9 Heat-shrink stretched panel areas
2.0.3.10 Cold-shrink stretched panel areas
2.0.3.11 Apply protective coatings and sealants
2.0.3.12 Cut out damaged panels and weld in replacements
2.0.3.13 Repair or replace door skins and intrusions beams
2.0.3.14 Repair or replace plastic panels

COMPETENCY 2.0.4: Apply body filling

COMPETENCY BUILDERS:

2.0.4.1 Practice safety procedures
2.0.4.2 Mix plastic filler according to manufacturer's specifications
2.0.4.3 Apply plastic filler and cheese-grate during curing
2.0.4.4 Rough-sand cured plastic filler
2.0.4.5 Finish-sand plastic filler

COMPETENCY 2.0.5: Repair moveable glass and hardware

COMPETENCY BUILDERS:

2.0.5.1 Practice safety procedures
2.0.5.2 Inspect, adjust, and repair or replace window regulators and run channels, glass, power mechanisms, and related controls
2.0.5.3 Repair or replace all power-driven accessories and related controls (including electrically-heated glass)
2.0.5.4 Diagnose and repair water leaks, dust leaks, and wind noises
2.0.5.5 Inspect and repair or replace weatherstripping
2.0.5.6 Inspect, repair or replace, and adjust sun roof and related mechanisms
2.0.5.7 Inspect and repair or replace convertible top and related mechanisms

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COMPETENCY 2.0.6: Perform gas metal arc welding (GMAW) functions

COMPETENCY BUILDERS:

2.0.6.1 Practice safety procedures
2.0.6.2 Identify weldable and nonweldable materials used in autobody components
2.0.6.3 Determine electrode wire type and diameter and gas to use
2.0.6.4 Determine electrode stickout, amperage, and wire feed speed
2.0.6.5 Set up welder
2.0.6.6 Clean gun and gas nozzle
2.0.6.7 Adjust welder to material being welded
2.0.6.8 Weld joint
2.0.6.9 Protect computers and other electronic modules
2.0.6.10 Clean metal to be welded
2.0.6.11 Determine correct joint type (e.g., butt, lap)
2.0.6.12 Determine correct weld type (e.g., continuous, stitch or pulse, tack, plug)
2.0.6.13 Identify weld problems (e.g., spits and sputters, burn through, lack of penetrations, cracks in metal, porosity, incomplete fusion, excessive spatter, distortion, and waviness of bead)
2.0.6.14 Troubleshoot welder (e.g., cause(s) of tip burn-back and failure of wire to feed)
2.0.6.15 Adjust welder

<u>UNIT 3:</u> <u>Structural Analysis and Damage Repair</u>

COMPETENCY 3.0.1: Repair frame

COMPETENCY BUILDERS:

3.0.1.1 Practice safety procedures
3.0.1.2 Diagnose and measure structural damage using tram and centering gauges
3.0.1.3 Straighten and align mash (collapse) damage
3.0.1.4 Straighten and align sag damage
3.0.1.5 Straighten and align sideways damage
3.0.1.6 Straighten and align twist damage
3.0.1.7 Repair to factory specifications using dimension manual
3.0.1.8 Straighten and align kickup damage
3.0.1.9 Straighten and align diamond frame damage
3.0.1.10 Remove and replace damaged frame horns, side rails, cross members, and front or rear sections according to factory specifications
3.0.1.11 Clean, prime, and protective coat repaired frame areas
3.0.1.12 Repair, reinforce, or replace weakened or cracked frame members

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COMPETENCY 3.0.2: Repair unibody according to manufacturer's specifications

COMPETENCY BUILDERS:

3.0.2.1 Practice safety procedures
3.0.2.2 Identify bent or damaged steering, suspension, and power train components that can cause vibration, steering and 4-wheel alignment problems
3.0.2.3 Diagnose and measure unibody damage using a dedicated (fixture) measuring system
3.0.2.4 Diagnose and measure unibody damage using a universal measuring system
3.0.2.5 Determine direct and indirect damage and the direction of impact
3.0.2.6 Plan methods and order of repair
3.0.2.7 Attach body anchoring devices
3.0.2.8 Straighten and align cowl assembly
3.0.2.9 Straighten and align roof rails (headers) and roof panels
3.0.2.10 Straighten and align all hinge and lock pillars
3.0.2.11 Straighten and align all body openings, floor pans, and rocker panels
3.0.2.12 Straighten and align quarter panels, wheel house assemblies, and rear body sections (including rails, suspension, and power train mounting points)
3.0.2.13 Straighten and align front-end sections (e.g., aprons, strut towers, upper and lower rails, steering, suspension, and power train mounting points)
3.0.2.14 Apply heat stress relief methods and weld
3.0.2.15 Apply cold stress relief methods and weld
3.0.2.16 Repair, weld, or replace high-strength steel body panels
3.0.2.17 Perform structural panel sectioning
3.0.2.18 Correct or adjust panel contour and alignment
3.0.2.19 Clean, prime, and coat repaired unibody structural areas and internal components

COMPETENCY 3.0.3: Repair modular and fixed glass

COMPETENCY BUILDERS:

3.0.3.1 Practice safety procedures
3.0.3.2 Remove and replace fixed glass
3.0.3.3 Remove and replace modular glass
3.0.3.4 Remove and replace butyl-retained, modular glass with mechanical fasteners
3.0.3.5 Remove and replace urethane-retained, modular glass with mechanical fasteners

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UNIT 4: Mechanical and Electrical Components

COMPETENCY 4.0.1: Identify lubricants and fluids

COMPETENCY BUILDERS:

4.0.1.1 Differentiate uses of lubricants and fluids
4.0.1.2 Follow manufacturer's specifications

COMPETENCY 4.0.2: Repair suspension and steering (SPECIAL NOTE: DO NOT use heat on suspension and steering critical parts.)

COMPETENCY BUILDERS:

4.0.2.1 Practice safety procedures
4.0.2.2 Identify damaged suspension system fasteners that should not be reused
4.0.2.3 Inspect and replace rack-and-pinion steering gear, inner tie rod ends (sockets), and bellows boots
4.0.2.4 Inspect, adjust tension and alignment, and replace power steering pump belt(s)
4.0.2.5 Remove and replace power steering pump
4.0.2.6 Inspect pump mounts
4.0.2.7 Inspect and replace power steering hoses and fittings
4.0.2.8 Remove and replace non-rack-and-pinion power steering gears
4.0.2.9 Remove and replace power rack-and-pinion steering gear
4.0.2.10 Inspect and replace mounting bushings and brackets
4.0.2.11 Inspect and adjust steering linkage geometry
4.0.2.12 Inspect and replace pitman arm
4.0.2.13 Inspect and replace relay (center-link or intermediate) rod
4.0.2.14 Remove and replace idler arm and mountings
4.0.2.15 Remove, replace, and adjust tie rods, tie rod sleeves, clamps, and tie rod ends (sockets)
4.0.2.16 Remove and replace steering linkage damper
4.0.2.17 Remove and replace upper and lower control arms
4.0.2.18 Remove and replace upper and lower control arm busings, shafts, and rebound bumpers
4.0.2.19 Remove and replace strut rods and bushings on long and short arm suspension systems
4.0.2.20 Remove and replace steering knuckle or spindle assemblies
4.0.2.21 Remove and replace front suspension system coil springs and spring insulators (silencers)
4.0.2.22 Inspect, replace, and adjust front suspension system torsion bars and inspect mounts

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4.0.2.23 Inspect and replace stabilizer bar bushings, brackets, and links
4.0.2.24 Inspect and replace MacPherson strut cartridge or assembly, upper bearing, and mount
4.0.2.25 Remove and replace rear suspension system coil springs and spring insulators (silencers)
4.0.2.26 Inspect, remove, and replace rear suspension system transverse links, control arms, stabilizer bars, bushings, and mounts
4.0.2.27 Inspect, remove, and replace rear suspension system leaf spring(s), leaf spring insulators (silencers), shackles, brackets, bushings, and mounts
4.0.2.28 Inspect rear axle assembly for bending, warpage, and misalignment
4.0.2.29 Remove and replace shock absorbers
4.0.2.30 Inspect and replace air shock absorbers, load-leveling devices, air springs, and associated lines and fittings
4.0.2.31 Diagnose, inspect, adjust, and repair or replace components of electronically-controlled suspension systems
4.0.2.32 Measure vehicle ride height to determine needed repairs
4.0.2.33 Remove, replace, and align front and rear subframes
4.0.2.34 Diagnose damage, looseness, and binding problems in steering column (including tilt mechanisms)
4.0.2.35 Diagnose non-rack-and-pinion manual steering gear for noises, binding, uneven turning effort, looseness, hard steering, and lubricant leakage problems
4.0.2.36 Diagnose manual rack-and-pinion steering gear for noises, vibration, looseness, and hard steering problems
4.0.2.37 Inspect and replace steering shaft U-joint(s), flexible coupling(s), collapsible columns, and steering wheels
4.0.2.38 Diagnose non-rack-and-pinion power steering gear for noises, binding, uneven turning effort, looseness, hard steering, and fluid leakage problems
4.0.2.39 Diagnose front and rear suspension system for noises, body sway, and ride height problems
4.0.2.40 Diagnose MacPherson strut suspension system for noises, body sway, and ride height problems
4.0.2.41 Diagnose vehicle wandering, pulling hard steering, bump steering, memory steering, torque steering, and steering return problems*
4.0.2.42 Check and adjust front and rear wheel camber on suspension systems
4.0.2.43 Check front and rear wheel camber on nonadjustable suspension system to determine needed repairs
4.0.2.44 Check and adjust caster on suspension systems

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*Advancing
**Futuring

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4.0.2.45 Check caser on nonadjustable suspension systems for needed repairs
4.0.2.46 Check unibody measurements or bent suspension parts
4.0.2.47 Check and adjust front wheel toe
4.0.2.48 Center steering wheel
4.0.2.49 Check toe-out-on-turns (turning radius) for needed repairs
4.0.2.50 Check steering axis inclination (SAI) or king pin inclination (KPI) for needed repairs
4.0.2.51 Check included angle for needed repairs
4.0.2.52 Check rear wheel toe for needed repairs
4.0.2.53 Check rear wheel thrust angle for needed repairs
4.0.2.54 Check front wheel setback for needed repairs
4.0.2.55 Diagnose tire wear patterns for needed repairs
4.0.2.56 Inspect and adjust air pressure in tires
4.0.2.57 Diagnose wheel or tire vibration, shimmy, and tramp problems
4.0.2.58 Rotate tires
4.0.2.59 Measure wheel, tire, axle, and hub runout and determine needed repairs
4.0.2.60 Diagnose tire pull (lead) problems
4.0.2.61 Balance static and/or dynamic wheel and tire assembly

COMPETENCY 4.0.3: Repair electrical systems

COMPETENCY BUILDERS:

4.0.3.1 Practice safety procedures
4.0.3.2 Apply mathematical skills
4.0.3.3 Check voltages in electrical wiring circuits with voltmeter to determine needed repairs
4.0.3.4 Check continuity and resistances in electrical wiring circuits and components with digital ohmmeter to determine needed repairs
4.0.3.5 Inspect, test, and replace fusible links, circuit breakers, and fuses
4.0.3.6 Perform battery state-of-charge test to determine needed repairs
4.0.3.7 Inspect, clean, and replace battery
4.0.3.8 Perform slow or fast battery charge
4.0.3.9 Identify programmable electrical or electronic components and record date for reprogramming before disconnecting battery
4.0.3.10 Inspect, clean, and repair or replace battery cables, connectors, and clamps
4.0.3.11 Inspect, adjust, and replace alternator drive belts, pulleys, and fans

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*Advancing
**Futuring

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4.0.3.12 Remove and replace alternator
4.0.3.13 Remove, replace, align, and check operation of headlights, parking lights, taillights, fog lights, stoplights, flashers, turn-signals, and backup lights
4.0.3.14 Inspect, replace, and aim headlights or bulbs
4.0.3.15 Check operation of retractable headlight assembly
4.0.3.16 Remove and replace motors, switches, relay connectors, and wires of retractable headlight assembly circuits
4.0.3.17 Use dielectric grease as needed
4.0.3.18 Inspect, test, and repair or replace switches, relays, bulbs, sockets, connectors, and wires of all light circuits, including four-wire taillight systems
4.0.3.19 Remove and replace horn(s) and check operation
4.0.3.20 Check operation of windshield wiper and washer system
4.0.3.21 Check operation of power side windows and power tailgate window
4.0.3.22 Remove, replace, and check operation of power seat, motors, linkages, and cables
4.0.3.23 Remove, replace, and check operation of electric door and hatch or trunk lock components
4.0.3.24 Remove, replace, and check operation of components of keyless lock and unlock devices
4.0.3.25 Remove, replace, and check operation of electrical sunroof and convertible top components
4.0.3.26 Check operation and repair electrically heated mirrors, windshields, backlights, and panels
4.0.3.27 Remove, replace, and check operation of components of power antenna circuits

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COMPETENCY 4.0.4: Repair brakes and automatic brake system (ABS)

COMPETENCY BUILDERS:

4.0.4.1 Practice safety procedures
4.0.4.2 Repair brakes and ABS according to manufacturer's specifications
4.0.4.3 Inspect brake lines and fittings for leaks, dents, kinks, rust, cracks, or wear
4.0.4.4 Tighten loose fittings and supports
4.0.4.5 Replace brake lines (double flare and ISO types), hoses, fittings, and supports
4.0.4.6 Inspect flexible brake hoses for leaks, kinks, cracks, bulging, or wear
4.0.4.7 Select, handle, store, and install brake fluids, including silicone fluids (SPECIAL NOTE: Do not use contaminated brake fluid.)
4.0.4.8 Bleed (using manual, pressure, vacuum, or surge method) and/or flush hydraulic brake system
4.0.4.9 Pressure-test brake hydraulic system
4.0.4.10 Adjust brake shoes and reinstall brake drums and/or drum/hub assemblies and wheel bearings
4.0.4.11 Reinstall wheel, torque lug nuts to manufacturer's specifications, and make final adjustments
4.0.4.12 Remove and replace caliper assembly
4.0.4.13 Clean and inspect caliper mountings and slides for wear and damage
4.0.4.14 Check operation of parking brake system
4.0.4.15 Inspect ABS/Traction Control brake sensors and wiring for damage
4.0.4.16 Troubleshoot using flowcharts
4.0.4.17 Repair or replace sensors and/or wiring

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COMPETENCY 4.0.5: Repair heating and air-conditioning (AC)

COMPETENCY BUILDERS:

4.0.5.1 Practice safety procedures
4.0.5.2 Follow EPA guidelines
4.0.5.3 Apply theory of AC system
4.0.5.4 Discharge AC system
4.0.5.5 Evacuate AC system
4.0.5.6 Flush AC system components and hoses
4.0.5.7 Charge liquid or vapor AC system and perform leak test
4.0.5.8 Inspect and correct oil level in AC system
4.0.5.9 Inspect, adjust, and replace AC compressor drive belts and pulleys
4.0.5.10 Plug and seal lines
4.0.5.11 Remove and replace AC compressor
4.0.5.12 Inspect and repair or replace AC compressor mountings
4.0.5.13 Inspect and repair or replace AC system mufflers, hoses, lines, fittings, and seals
4.0.5.14 Inspect AC condenser for air flow restrictions
4.0.5.15 Clean and straighten fins
4.0.5.16 Inspect, test, and replace AC system condenser and mountings
4.0.5.17 Inspect and replace receiver or accumulator drier
4.0.5.18 Inspect, test, and replace evaporator
4.0.5.19 Inspect and repair evaporator housing water drain
4.0.5.20 Inspect, test, and repair or replace heating, ventilating, and AC vacuum components
4.0.5.21 Inspect and repair AC component wiring
4.0.5.22 Inspect, test, and repair heating, ventilating, and AC ducts, doors, hoses, and outlets
4.0.5.23 Inspect, flush, and replace heater core

COMPETENCY 4.0.6: Repair cooling system

COMPETENCY BUILDERS:

4.0.6.1 Practice safety procedures
4.0.6.2 Inspect and replace engine cooling and heater system hoses and belts
4.0.6.3 Inspect, remove, and replace radiator, pressure cap, coolant recovery system, and water pump
4.0.6.4 Remove and replace thermostat, bypass, and housing
4.0.6.5 Drain, flush, and refill system with proper coolant at appropriate level of protection
4.0.6.6 Remove and replace fan, electrical and mechanical fan clutch, and fan shroud
4.0.6.7 Inspect, remove, and replace auxiliary oil coolers
4.0.6.8 Follow manufacturer's specifications for mixture of coolant and bleeding

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COMPETENCY 4.0.7: Repair drive train

COMPETENCY BUILDERS:

4.0.7.1 Practice safety procedures
4.0.7.2 Remove and replace shift or clutch linkage*
4.0.7.3 Remove and replace cables or linkages for throttle valve (TV), kickdown, and accelerator pedal*
4.0.7.4 Remove and replace electronic sensors, wires, and connectors*
4.0.7.5 Remove and replace power train assembly
4.0.7.6 Inspect, replace, and align power mounts transmission
4.0.7.7 Remove and replace rear axle assembly
4.0.7.8 Measure and/or adjust half shaft position and angle
4.0.7.9 Remove, inspect, and replace front-drive half shafts and axle knuckles

COMPETENCY 4.0.8: Repair fuel, intake, and exhaust systems

COMPETENCY BUILDERS:

4.0.8.1 Practice safety procedures
4.0.8.2 Remove, inspect, and replace exhaust system including manifold, manifold heat control valves (heat risers), exhaust pipes, mufflers, converters, resonators, tail pipes, and heat shields
4.0.8.3 Determine type of fuel for car
4.0.8.4 Defuel and refuel safely
4.0.8.5 Remove, inspect, and replace gas tank, gas tank filter, and gas cap
4.0.8.6 Inspect and replace fuel lines and hoses
4.0.8.7 Check fuel for contaminants
4.0.8.8 Remove, inspect, and replace air injection reaction (AIR) system including pump, pressure relief valve, filter, pulley, belt, hoses, valves, air manifolds, and nozzles*
4.0.8.9 Remove, inspect, and replace pulse air valve(s) and hoses of exhaust pulse-type air injection systems*
4.0.8.10 Remove, inspect, and replace heat stove shroud, hot air pipe, and damper of inlet air temperature control systems*
4.0.8.11 Remove, inspect, and replace liquid vapor separator, liquid check valve, lines, and hoses of fuel vapor control systems*
4.0.8.12 Remove, inspect, and replace canister and filter of fuel vapor control systems*
4.0.8.13 Purge lines of fuel vapor control systems*

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COMPETENCY 4.0.9: Repair active restraint systems

COMPETENCY BUILDERS:

4.0.9.1 Practice safety procedures
4.0.9.2 Recognize liability factor
4.0.9.3 Remove and replace seatbelt and shoulder harness assembly
4.0.9.4 Inspect anchorage and complete retractor assembly for deformation and needed repairs
4.0.9.5 Verify proper operation of seatbelt

COMPETENCY 4.0.10: Repair passive restraint systems

COMPETENCY BUILDERS:

4.0.10.1 Practice safety procedures
4.0.10.2 Recognize liability factor
4.0.10.3 Remove and replace seatbelt and shoulder harness assembly
4.0.10.4 Inspect anchorage for deformation and needed repairs
4.0.10.5 Verify proper operation of seatbelt
4.0.10.6 Remove, inspect, and replace track and drive assembly, lap retractor, torso retractor assembly, inboard buckle-lap retractor, and knee blocker

COMPETENCY 4.0.11: Repair supplemental air bag restraint systems according to manufacturer's specifications

COMPETENCY BUILDERS:

4.0.11.1 Practice safety procedures
4.0.11.2 Recognize liability factor
4.0.11.3 Disarm airbag system
4.0.11.4 Inspect and replace damaged sensors and wiring
4.0.11.5 Replace deployed airbag modules
4.0.11.6 Remove and replace nondeployed airbag
4.0.11.7 Verify that system is armed and operational
4.0.11.8 Use fault codes to diagnose and repair airbag system according to flowcharts

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UNIT 5: Plastics and Adhesives

COMPETENCY 5.0.1: Identify and repair rigid plastic parts

COMPETENCY BUILDERS:

5.0.1.1 Practice safety procedures
5.0.1.2 Repair with hot-air welding
5.0.1.3 Repair with airless welding
5.0.1.4 Repair with urethane or epoxy adhesives
5.0.1.5 Repair with urethane or epoxy adhesives and fiberglass reinforcements
5.0.1.6 Repair holes and cuts using backing materials and adhesives
5.0.1.7 Repair vinyl-clad urethane foam parts
5.0.1.8 Remove damaged areas from rigid exterior sheet-molded compound (SMC) and bulk-molded compound (BMC) panels
5.0.1.9 Repair with partial panel installation

COMPETENCY 5.0.2: Identify and repair flexible plastic parts

COMPETENCY BUILDERS:

5.0.2.1 Practice safety procedures
5.0.2.2 Repair with airless welding
5.0.2.3 Repair with urethane or epoxy adhesives
5.0.2.4 Repair with urethane or epoxy adhesives and fiberglass reinforcements
5.0.2.5 Repair holes and cuts using backing materials and adhesives
5.0.2.6 Reshape and shrink flexible exterior plastic parts

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UNIT 6: Painting and Refinishing

COMPETENCY 6.0.1: Prepare surface

COMPETENCY BUILDERS:

6.0.1.1 Practice safety procedures
6.0.1.2 Wash vehicle
6.0.1.3 Remove and store trim and molding
6.0.1.4 Remove dirt, wax, road grime, and special coatings
6.0.1.5 Inspect and identify type of finish and surface condition
6.0.1.6 Develop a plan for refinishing
6.0.1.7 Remove paint finish chemically and mechanically
6.0.1.8 Sand areas using dry and wet methods with appropriate grit abrasive
6.0.1.9 Featheredge broken areas
6.0.1.10 Identify type of metal and apply suitable metal treatments
6.0.1.11 Mask trim and other areas not being refinished
6.0.1.12 Mix primer, primer-surfacer, or primer-sealer according to paint manufacturer's specifications
6.0.1.13 Spray primer, primer-surfacer, or primer-sealer onto surface of repaired area
6.0.1.14 Compound or prepare around edge of repaired area and adjacent panels
6.0.1.15 Wash entire vehicle, including cracks and moldings
6.0.1.16 Use proper solvent to clean area to be refinished
6.0.1.17 Use tack rag to remove dust or lint particles from area to be refinished
6.0.1.18 Apply sealer
6.0.1.19 Remove nibs or overspray from sealer by scuff sanding
6.0.1.20 Apply and blend adhesion promoter over areas to be painted
6.0.1.21 Apply stone chip-resistant coating to lower body areas
6.0.1.22 Restore corrosion-resistant coatings, undercoatings, caulking, and seam sealers to repaired areas

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COMPETENCY 6.0.2: Perform spray gun operations

COMPETENCY BUILDERS:

6.0.2.1 Practice safety procedures
6.0.2.2 Inspect, clean, and determine condition and adequacy of spray guns and related equipment (e.g., air hose, regulator, air lines, and compressor)
6.0.2.3 Check and adjust air pressure on the spray gun including siphon-feed, pressure-feed, and gravity-feed
6.0.2.4 Adjust spray gun using fluid and pattern control valves
6.0.2.5 Check and adjust high volume, low pressure (HVLP) spraying equipment
6.0.2.6 Check and adjust low volume, low pressure (LVLP) spraying equipment

COMPETENCY 6.0.3: Mix, match, and apply paint

COMPETENCY BUILDERS:

6.0.3.1 Practice safety procedures
6.0.3.2 Determine type and color of paint on vehicle using manufacturer's paint codes
6.0.3.3 Follow paint manufacturer's specifications
6.0.3.4 Shake, stir, thin or reduce, and strain paint
6.0.3.5 Use viscosity cup
6.0.3.6 Select proper air pressure and spraying technique (e.g., gun arc, gun angle, gun distance, gun speed, and spray pattern overlap) for finish being applied
6.0.3.7 Apply paint on test panel
6.0.3.8 Apply top coat of acrylic enamel, urethane, or water-born acrylic lacquer for spot and panel blending and overall refinishing
6.0.3.9 Apply acrylic lacquer base-coat or clear-coat for spot and panel blending
6.0.3.10 Apply urethane enamel base-coat or clear-coat for spot and panel blending and overall refinishing
6.0.3.11 Check for color matching
6.0.3.12 Check for color tint*
6.0.3.13 Select and perform sanding, buffing, and polishing processes for finish
6.0.3.14 Identify types of rigid and flexible plastic parts to be finished and determine correct materials and refinishing procedures
6.0.3.15 Apply finish coat to rigid and flexible plastic parts
6.0.3.16 Clean, condition, and refinish vinyl (e.g., upholster, dashes, and tops)
6.0.3.17 Prepare materials and apply three-stage paint system

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COMPETENCY 6.0.4: Identify and correct finish defects

COMPETENCY BUILDERS:

6.0.4.1 Practice safety procedures
6.0.4.2 Identify problem(s) (e.g., poor adhesion, tape tracking, paint cracking, rust spots, pin-holing, fish eyes, blistering, water spotting, bird droppings, tree sap, airborne contaminants, die-back conditions, chalking, body-filler bleed-through, crowsfeet or crazing appearance, dirt, dry spray pattern, lifting, mottling, streaking, overspray, sags and runs, sand scratch swelling and splitting, off-shade coloring, buffing-wheel burns)
6.0.4.3 Determine cause(s)
6.0.4.4 Correct condition

COMPETENCY 6.0.5: Perform detailing procedures

COMPETENCY BUILDERS:

6.0.5.1 Practice safety procedures
6.0.5.2 Remove and dispose of masking tape and paper after proper drying time
6.0.5.3 Replace emblems, chrome, and trim
6.0.5.4 Clean vehicle and detail
6.0.5.5 Apply decals, transfers, tapes, woodgrains, and painted and taped pinstripes
6.0.5.6 Remove overspray

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UNIT 7: Service Management

COMPETENCY 7.0.1: Manage and operate body shop

COMPETENCY BUILDERS:

7.0.1.1 Practice safety procedures
7.0.1.2 Estimate repairs*
7.0.1.3 Read and interpret shop manuals*
7.0.1.4 Order parts and materials*
7.0.1.5 Maintain inventory*
7.0.1.6 Maintain records*
7.0.1.7 Identify cost of materials
7.0.1.8 Maintain shop equipment and tools
7.0.1.9 Hire employees*
7.0.1.10 Supervise employees*
7.0.1.11 Dismiss employees*
7.0.1.12 Schedule employees' work*
7.0.1.13 Act as shop foreman*
7.0.1.14 Maintain actual labor time records
7.0.1.15 Maintain payroll records*
7.0.1.16 Layout and arrange shop*
7.0.1.17 Implement shop organization

COMPETENCY 7.0.2: Maintain company security requirements

COMPETENCY BUILDERS:

7.0.2.1 Practice safety procedures
7.0.2.2 Use company procedural manuals
7.0.2.3 Plan security procedures*
7.0.2.4 Implement security procedures
7.0.2.5 Apply business ethics
7.0.2.6 Document security procedures*
7.0.2.7 Perform security checks

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COMPETENCY 7.0.3: Manage customer relations

COMPETENCY BUILDERS:

7.0.3.1 Greet customers
7.0.3.2 Maintain professional appearance and positive attitude
7.0.3.3 Provide information
7.0.3.4 Ask questions
7.0.3.5 Develop public relations program
7.0.3.6 Maintain self-control
7.0.3.7 Display honest and forthright manner
7.0.3.8 Apply oral communications skills
7.0.3.9 Project positive company image
7.0.3.10 Treat customers with respect
7.0.3.11 Instill customer confidence

COMPETENCY 7.0.4: Conduct training*

COMPETENCY BUILDERS:

7.0.4.1 Practice safety procedures*
7.0.4.2 Analyze training needs*
7.0.4.3 Secure training personnel, resources, materials, and equipment*
7.0.4.4 Monitor training*
7.0.4.5 Support and recognize employee development*
7.0.4.6 Evaluate employee progress*
7.0.4.7 Provide appropriate feedback*

COMPETENCY 7.0.5: Order parts*

COMPETENCY BUILDERS:

7.0.5.1 Maintain parts inventory and control*
7.0.5.2 Select vendors*
7.0.5.3 Use technical manuals*
7.0.5.4 Inspect parts on delivery*
7.0.5.5 File damaged or lost parts claims*
7.0.5.6 Interpret Vehicle Identification Number (VIN) codes*
7.0.5.7 Interpret code tags for accessories*

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COMPETENCY 7.0.6: Prepare estimates*

COMPETENCY BUILDERS:

7.0.6.1 Write and spell legibly*
7.0.6.2 Use mathematical skills*
7.0.6.3 Demonstrate knowledge of technical information*
7.0.6.4 Communicate with customer*
7.0.6.5 Establish value of vehicle*
7.0.6.6 Organize damage sheet*
7.0.6.7 Operate computer using proper keyboarding skills*
7.0.6.8 Establish level of quality workmanship*
7.0.6.9 Distinguish between repair and replace*
7.0.6.10 Recognize new and used parts*
7.0.6.11 Recognize hidden damage*
7.0.6.12 Identify paint systems*
7.0.6.13 Analyze local marketplace*
7.0.6.14 Recognize local and antitrust laws*
7.0.6.15 Maintain awareness of competition*
7.0.6.16 Calculate labor costs using flat rate manuals*
7.0.6.17 Calculate material costs using parts manuals*
7.0.6.18 Calculate overhead and job costs*
7.0.6.19 Review estimate with customer*

COMPETENCY 7.0.7: Prepare documentation*

COMPETENCY BUILDERS:

7.0.7.1 Write repair work orders*
7.0.7.2 Calculate and prepare sublet billing*
7.0.7.3 Calculate and prepare supplemental billing*
7.0.7.4 Confirm parts prices*
7.0.7.5 Evaluate job costs*

UNIT 8: Communications

COMPETENCY 8.0.1: Apply communications skills

COMPETENCY BUILDERS:

8.0.1.1 Read, interpret, and follow written instructions
8.0.1.2 Apply basic grammar rules
8.0.1.3 Write legibly
8.0.1.4 Interpret charts, graphs, schematics, illustrations, and tables

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COMPETENCY 8.0.2: Apply oral communications skills

COMPETENCY BUILDERS:

8.0.2.1 Apply proper telephone etiquette
8.0.2.2 Use effective listening skills
8.0.2.3 Speak clearly
8.0.2.4 Ask questions
8.0.2.5 Interpret and follow oral instructions
8.0.2.6 Clarify instructions
8.0.2.7 Communicate with vendors
8.0.2.8 Communicate with employees and employer
8.0.2.9 Participate in group discussions

COMPETENCY 8.0.3: Use job-related reference materials

COMPETENCY BUILDERS:

8.0.3.1 Identify needed reference materials
8.0.3.2 Locate and assemble reference materials
8.0.3.3 Apply information from reference materials

UNIT 9: Occupational Skills

COMPETENCY 9.0.1: Apply Mathematical Skills

COMPETENCY BUILDERS:

9.0.1.1 Solve addition, subtraction, multiplication, and division problems manually
9.0.1.2 Solve addition, subtraction, multiplication, and division problems using a calculator
9.0.1.3 Convert and reduce fractions
9.0.1.4 Add, subtract, multiply, and divide fractions
9.0.1.5 Add, subtract, multiply, and divide using percentages
9.0.1.6 Add, subtract, multiply, and divide using decimals
9.0.1.7 Compute and apply measurements (e.g., angles, area, volume, time, and costs)
9.0.1.8 Compute discounts and simple interest
9.0.1.9 Use ratios and proportions
9.0.1.10 Perform data analysis
9.0.1.11 Read and apply metric system

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COMPETENCY 9.0.2: Demonstrate business and work ethics

COMPETENCY BUILDERS:

9.0.2.1 Maintain positive attitude
9.0.2.2 Attend work as scheduled
9.0.2.3 Be punctual
9.0.2.4 Be dependable
9.0.2.5 Adhere to rules of conduct
9.0.2.6 Employ characteristics and responsibilities of teamwork
9.0.2.7 Apply time-management techniques
9.0.2.8 Respect property of customers and others
9.0.2.9 Be flexible
9.0.2.10 Show initiative
9.0.2.11 Be organized
9.0.2.12 Be self-confident
9.0.2.13 Adhere to company, governmental, and regulatory policies and procedures
9.0.2.14 Recognize constructive criticism in evaluation and implement change
9.0.2.15 Take pride in work
9.0.2.16 Be friendly
9.0.2.17 Be honest
9.0.2.18 Display empathy toward others
9.0.2.19 Resolve conflict
9.0.2.20 Manage stress
9.0.2.21 Exercise confidentiality
9.0.2.22 Be loyal
9.0.2.23 Be responsible for actions
9.0.2.24 Prioritize work
9.0.2.25 Avoid personal activities during work hours
9.0.2.26 Leave personal problems at home
9.0.2.27 Control anger
9.0.2.28 Avoid sexual connotations and harassment

COMPETENCY 9.0.3: Demonstrate professional image

COMPETENCY BUILDERS:

9.0.3.1 Exhibit professional appearance
9.0.3.2 Exhibit professional manners
9.0.3.3 Project professional attitude
9.0.3.4 Encourage professional image in others
9.0.3.5 Encourage community involvement

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COMPETENCY 9.0.4: Maintain technical proficiency

COMPETENCY BUILDERS:

9.0.4.1 Research information
9.0.4.2 Read technical manuals, journals, and periodicals
9.0.4.3 Attend meetings, workshops, seminars, conferences, and demonstrations
9.0.4.4 Participate in professional organizations (e.g., ASE, ASA, I-C)
9.0.4.5 Participate in formal and informal education and training opportunities

UNIT 10: Employability Skills

SUBUNIT 10.1: Career Development

COMPETENCY 10.1.1: Investigate career options

COMPETENCY BUILDERS:

10.1.1.1 Determine interests and aptitudes
10.1.1.2 Identify career options
10.1.1.3 Research occupations matching interests and aptitudes
10.1.1.4 Select career(s) that best match(es) interests and aptitudes
10.1.1.5 Identify advantages and disadvantages of career options, including nontraditional careers
10.1.1.6 Assess differences in wages, annual incomes, and job opportunities based on geographic location
10.1.1.7 Develop a career plan

COMPETENCY 10.1.2: Analyze potential barriers to employment

COMPETENCY BUILDERS:

10.1.2.1 Identify common barriers to employment
10.1.2.2 Develop strategies to overcome employment barriers

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UNIT 10: Employability Skills

SUBUNIT 10.2: Decision Making and Problem Solving

COMPETENCY 10.2.1: Apply decision-making techniques in the workplace

COMPETENCY BUILDERS:

10.2.1.1 Identify the decision to be made
10.2.1.2 Compare alternatives
10.2.1.3 Determine consequences of each alternative
10.2.1.4 Make decisions based on values and goals
10.2.1.5 Evaluate the decision made

COMPETENCY 10.2.2: Apply problem-solving techniques in the workplace

COMPETENCY BUILDERS:

10.2.2.1 Diagnose the problem and its causes
10.2.2.2 Identify alternatives and their consequences in relation to the problem
10.2.2.3 Examine multicultural and nonsexist dimensions of problem solving
10.2.2.4 Utilize resources to explore possible solutions to the problem
10.2.2.5 Compare and contrast the advantages and disadvantages of each solution
10.2.2.6 Determine appropriate action
10.2.2.7 Evaluate results

UNIT 10: Employability Skills

SUBUNIT 10.3: Work Ethic

COMPETENCY 10.3.1: Evaluate the relationship of self-esteem to work ethic

COMPETENCY BUILDERS:

10.3.1.1 Identify special characteristics and abilities in self and others
10.3.1.2 Identify internal and external factors that affect self-esteem

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COMPETENCY 10.3.2: Analyze the relationship of personal values and goals to work ethic both in and out of the workplace

COMPETENCY BUILDERS:

10.3.2.1 Distinguish between values and goals
10.3.2.2 Determine the importance of values and goals
10.3.2.3 Evaluate how values affect goals
10.3.2.4 Identify short-term and long-term goals
10.3.2.5 Prioritize personal goals
10.3.2.6 Describe how personal values are reflected in work ethic
10.3.2.7 Describe how interactions in the workplace affect personal work ethic
10.3.2.8 Examine how life changes affect personal work ethic

COMPETENCY 10.3.3: Demonstrate work ethic

COMPETENCY BUILDERS:

10.3.3.1 Examine factors that influence work ethic
10.3.3.2 Exhibit characteristics that reflect an appropriate work ethic

UNIT 10: Employability Skills

SUBUNIT 10.4: Job-Seeking Skills

COMPETENCY 10.4.1: Prepare for employment

COMPETENCY BUILDERS:

10.4.1.1 Identify traditional and nontraditional employment sources
10.4.1.2 Utilize employment sources
10.4.1.3 Research job opportunities, including nontraditional careers
10.4.1.4 Interpret equal employment opportunity laws
10.4.1.5 Explain the critical importance of personal appearance, hygiene, and demeanor throughout the employment process
10.4.1.6 Prepare for generic employment tests and those specific to an occupation/organization

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COMPETENCY 10.4.2: Design a résumé

COMPETENCY BUILDERS:

10.4.2.1 Identify personal strengths and weaknesses
10.4.2.2 List skills and/or abilities, career objective(s), accomplishments/achievements, educational background, and work experience
10.4.2.3 Demonstrate legible written communication skills using correct grammar, spelling, and concise wording
10.4.2.4 Complete résumé using various formats
10.4.2.5 Secure references

COMPETENCY 10.4.3: Complete and process job application forms

COMPETENCY BUILDERS:

10.4.3.1 Explain the importance of an application form
10.4.3.2 Identify ways to obtain job application forms
10.4.3.3 Describe methods for handling illegal questions on job application forms
10.4.3.4 Demonstrate legible written communications skills using correct grammar, spelling, and concise wording
10.4.3.5 Return application to proper person, request interview, and follow up

COMPETENCY 10.4.4: Demonstrate interviewing skills

COMPETENCY BUILDERS

10.4.4.1 Investigate interview environment and procedures
10.4.4.2 Explain the critical importance of personal appearance, hygiene, and demeanor
10.4.4.3 Demonstrate question and answer techniques
10.4.4.4 Demonstrate methods for handling difficult and/or illegal interview questions

COMPETENCY 10.4.5: Secure employment

COMPETENCY BUILDERS:

10.4.5.1 Identify present and future employment opportunities within an occupation/organization
10.4.5.2 Research the organization/company
10.4.5.3 Use follow-up techniques to enhance employment potential
10.4.5.4 Compare and evaluate job offers

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UNIT 10: Employability Skills

SUBUNIT 10.5: Job Retention Skills

COMPETENCY 10.5.1: Analyze the organizational structure of the workplace

COMPETENCY BUILDERS:

10.5.1.1 Identify and evaluate employer expectations regarding job performance, work habits, attitudes, personal appearance, and hygiene
10.5.1.2 Be aware of and obey all company policies and procedures
10.5.1.3 Examine the role/relationship between employee and employer
10.5.1.4 Recognize opportunities for advancement and reasons for termination

COMPETENCY 10.5.2: Maintain positive relations with others

COMPETENCY BUILDERS:

10.5.2.1 Exhibit appropriate work habits and attitude
10.5.2.2 Identify behaviors to establish successful working relationships
10.5.2.3 Cooperate and compromise through teamwork and group participation
10.5.2.4 Identify alternatives for dealing with harassment, bias, and discrimination based on race, color, national origin, sex, religion, handicap, or age

UNIT 10: Employability Skills

SUBUNIT 10.6: Job Advancement

COMPETENCY 10.6.1: Analyze opportunities for personal and career growth

COMPETENCY BUILDERS:

10.6.1.1 Determine opportunities within an occupation/organization
10.6.1.2 Compare and contrast other opportunities
10.6.1.3 List benefits of job advancement
10.6.1.4 Evaluate factors involved when assuming a new position within or outside an occupation/organization

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COMPETENCY 10.6.2: Exhibit characteristics needed for advancement

COMPETENCY BUILDERS:

10.6.2.1 Display a positive attitude
10.6.2.2 Demonstrate knowledge of a position
10.6.2.3 Perform quality work
10.6.2.4 Adapt to changing situations and technology
10.6.2.5 Demonstrate capability for different positions
10.6.2.6 Participate in continuing education/training programs
10.6.2.7 Respect, accept, and work with ALL individuals in the workplace

UNIT 10: Employability Skills

SUBUNIT 10.7: Technology in the Workplace

COMPETENCY 10.7.1: Assess the impact of technology in the workplace

COMPETENCY BUILDERS:

10.7.1.1 Cite how past business/industry practices have influenced present business/industry processes
10.7.1.2 Investigate the use of technology in the workplace
10.7.1.3 Analyze how present skills can be applied to learning new technologies

COMPETENCY 10.7.2: Use a variety of technological applications

COMPETENCY BUILDERS:

10.7.2.1 Explore basic mathematical, scientific, computer, and technological principles
10.7.2.2 Use technology to accomplish assigned tasks
10.7.2.3 Create solutions to problems using technical means

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UNIT 10: Employability Skills

SUBUNIT 10.8: Lifelong Learning

COMPETENCY 10.8.1: Apply lifelong learning to individual situations

COMPETENCY BUILDERS:

10.8.1.1 Define lifelong learning
10.8.1.2 Identify factors that cause the need for lifelong learning

COMPETENCY 10.8.2: Adapt to change

COMPETENCY BUILDERS:

10.8.2.1 Analyze the effects of change
10.8.2.2 Identify reasons why goals change
10.8.2.3 Describe the importance of flexibility when reevaluating goals
10.8.2.4 Evaluate the need for continuing education/training

UNIT 10: Employability Skills

SUBUNIT 10.9: Economic Education

COMPETENCY 10.9.1: Analyze global enterprise systems

COMPETENCY BUILDERS:

10.9.1.1 Identify characteristics of various enterprise systems
10.9.1.2 Examine the relationship between competition, risk, and profit
10.9.1.3 Illustrate how supply and demand influence price

COMPETENCY 10.9.2: Evaluate personal money management

COMPETENCY BUILDERS:

10.9.2.1 Describe the need for personal management records
10.9.2.2 Identify methods of taxation
10.9.2.3 Analyze how credit affects financial security
10.9.2.4 Compare types and methods of investments
10.9.2.5 Prepare a personal budget
10.9.2.6 Be an informed and responsible consumer
10.9.2.7 Analyze the effects of advertising on the consumer

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UNIT 10: Employability Skills

SUBUNIT 10.10: Balancing Work and Family

COMPETENCY 10.10.1: Analyze the effects of family on work

COMPETENCY BUILDERS:

10.10.1.1 Recognize how family values, goals, and priorities are reflected in the workplace
10.10.1.2 Identify present and future family structures and responsibilities
10.10.1.3 Describe personal and family roles
10.10.1.4 Analyze concerns of working parent(s)
10.10.1.5 Examine how family responsibilities can conflict with work
10.10.1.6 Resolve family-related conflicts
10.10.1.7 Explain how to use support systems/community resources to help resolve family-related conflicts

COMPETENCY 10.10.2: Analyze the effects of work on family

COMPETENCY BUILDERS:

10.10.2.1 Identify responsibilities associated with paid and nonpaid work
10.10.2.2 Compare the advantages and disadvantages of multiple incomes
10.10.2.3 Examine how work can conflict with family responsibilities
10.10.2.4 Describe how work-related stress can affect families
10.10.2.5 Identify family support systems and resources

UNIT 10: Employability Skills

SUBUNIT 10.11: Citizenship in the Workplace

COMPETENCY 10.11.1: Exercise the rights and responsibilities of citizenship in the workplace

COMPETENCY BUILDERS:

10.11.1.1 Identify the basic rights and responsibilities of citizenship
10.11.1.2 Examine the history and contributions of all racial, ethnic, and cultural groups

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COMPETENCY 10.11.2: Cooperate with others in the workplace

COMPETENCY BUILDERS:

10.11.2.1 Identify situations in which compromise is necessary
10.11.2.2 Examine how individuals from various backgrounds contribute to work-related situations
10.11.2.3 Demonstrate initiative to facilitate cooperation
10.11.2.4 Give and receive constructive criticism to enhance cooperation

UNIT 10: Employability Skills

SUBUNIT 10.12: Leadership

COMPETENCY 10.12.1: Evaluate leadership styles appropriate for the workplace

COMPETENCY BUILDERS:

10.12.1.1 Identify characteristics of effective leaders
10.12.1.2 Compare leadership styles
10.12.1.3 Demonstrate effective delegation skills
10.12.1.4 Identify opportunities to lead in the workplace

COMPETENCY 10.12.2: Demonstrate effective teamwork skills

COMPETENCY BUILDERS:

10.12.2.1 Identify the responsibilities of a valuable group member
10.12.2.2 Exhibit open-mindedness
10.12.2.3 Identify methods of involving each member of a team
10.12.2.4 Contribute to the efficiency and success of a group
10.12.2.5 Determine ways to motivate others

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COMPETENCY 10.12.3: Utilize effective communication skills

COMPETENCY BUILDERS:

10.12.3.1 Demonstrate the importance of listening
10.12.3.2 Demonstrate assertive communication
10.12.3.3 Recognize the importance of verbal and nonverbal cues and messages
10.12.3.4 Analyze written material
10.12.3.5 Prepare written material
10.12.3.6 Give and receive feedback
10.12.3.7 Articulate thoughts
10.12.3.8 Use appropriate language

UNIT 10: Employability Skills

SUBUNIT 10.13: Entrepreneurship

COMPETENCY 10.13.1: Evaluate the role of small business in the economy

COMPETENCY BUILDERS:

10.13.1.1 Identify the benefits of small business to a community
10.13.1.2 Analyze opportunities for small business in a community

COMPETENCY 10.13.2: Examine considerations of starting a business

COMPETENCY BUILDERS:

10.13.2.1 Research a business idea
10.13.2.2 Compare various ways to become a small business owner
10.13.2.3 Investigate factors to consider in financing a new business
10.13.2.4 Evaluate entrepreneurship as a career option

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